



11-06-06

Docket No. 7096/Y01/SYNX/SYNX/HMM

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Mail Stop Amendment
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Re: Inventor(s): Martin R. Elliott, Robert B. Lowrance, Michael R. Rice, Jeffrey C. Hudgens and Eric A. Enghardt
Title: METHOD AND APPARATUS FOR SUPPLYING SUBSTRATES TO A PROCESSING TOOL
Serial No.: 10/650,479
Filed: August 28, 2003
Examiner: Michael S. Lowe
Group Art Unit: 3652

Transmitted herewith is:

- ☒ PTO Form 1449;
☒ Information Disclosure Statement with seventy-nine cited references; and
☒ Return Postcard.

FEE CALCULATION					
Fee Items	Claims Filed	Included With Basic Fee	Extra Claims	Fee Rate	Total
Total Claims	N/A	- 20 =	-0-	X \$50.00	\$0.00
Independent Claims	N/A	- 3 =	-0-	X \$200.00	\$0.00
Basic Filing Fee (\$300.00), Utility Search Fee (\$500.00), Utility Examination Fee (\$200.00)				\$1000.00	\$0.00
TOTAL FEES					PAID

The Commissioner is hereby authorized to charge \$0.00 to Deposit Account No. 04-1696.

☒ The Commissioner is hereby authorized to charge any additional fees which may be required, or credit any overpayment to Deposit Account No. 04-1696. A duplicate copy of this transmittal is enclosed.

☒ Please address all future correspondence to: **Customer # 41161**
Dugan & Dugan, PC
55 South Broadway
Tarrytown, NY 10591

I hereby certify that this correspondence is being deposited with the United States Postal Service as express mail in an envelope addressed to: Mail Stop RCE, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

Express Mail Receipt No. EV977439022USDate of Deposit: 11/3/06

Signature:

Respectfully submitted,

Brian M. Dugan
Registration No. 41,720
(914) 332-9081



Express Mail Label No. EV977439022US

PATENTS
7096/Y01/SYNX/SYNX/HMM

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

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Serial No. : 10/650,479
Filed : August 28, 2003
For : METHOD AND APPARATUS FOR SUPPLYING
SUBSTRATES TO A PROCESSING TOOL
Group Art Unit : 3652
Customer No. : 41161

Mail Stop Amendment
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

INFORMATION DISCLOSURE STATEMENT

Sir:

In accordance with 37 C.F.R. §§ 1.56 and 1.97,
applicants wish to call the attention of the Examiner to the
following references:

U.S. Patent No. 4,006,813, Rene Fluck
U.S. Patent No. 4,166,527, Earl F. Beezer
U.S. Patent No. 4,222,479, Dugan, et al.
U.S. Patent No. 4,294,344, Johannes D. van Maanen
U.S. Patent No. 4,538,720, Jean-Louis Limousin
U.S. Patent No. 4,552,261, Raudat, et al.

U.S. Patent No. 4,584,944, Clarence A. Dehne
U.S. Patent No. 4,653,630, Anna Bravin
U.S. Patent No. 4,679,685, Kenji Inoko
U.S. Patent No. 4,702,365, Chong-Il Pak
U.S. Patent No. 4,708,727, Cardenas-Franco, et al.
U.S. Patent No. 4,720,006, Harald Lenherr
U.S. Patent No. 4,750,605, Brems, et al.
U.S. Patent No. 4,852,717, Ross, et al.
U.S. Patent No. 4,901,843, Jeffrey A. Lashyro
U.S. Patent No. 4,921,092, Crawford, et al.
U.S. Patent No. 5,052,544, David L. Anderson
U.S. Patent No. 5,092,450, Schommartz, et al.
U.S. Patent No. 5,341,915, Cordia, et al.
U.S. Patent No. 5,560,471, Prochut, et al.
U.S. Patent No. 5,664,254, Ohkura, et al.
U.S. Patent No. 5,782,338, Schuster, et al.
U.S. Patent No. 5,797,249, Thomas Patterson Hartness
U.S. Patent No. 5,829,574, Mario DelSanto
U.S. Patent No. 5,865,292, Aguilar, et al.
U.S. Patent No. 5,887,701, Mario Spatafora
U.S. Patent No. 6,209,710, Mueller, et al.
U.S. Patent No. 6,227,346, Lecomte, et al.
U.S. Patent No. 6,227,348, Frei, et al.
U.S. Patent No. 6,234,300, De Vos, et al.

U.S. Patent No. 1,639,758, Jervis B. Webb
U.S. Patent No. 1,906,036, William E. Wunderlich
U.S. Patent No. 2,153,071, Leonard J. Bishop
U.S. Patent No. 2,949,996, Roger Tonelli
U.S. Patent No. 3,058,604, Harper, et al.
U.S. Patent No. 3,131,801, Augusto Marchetti
U.S. Patent No. 3,184,032, John Petter Ingemar Jonsson
U.S. Patent No. 3,587,817, Bornstein, et al.
U.S. Patent No. 3,610,448, Ulrich Bornfleth
U.S. Patent No. 4,730,733, Kawamura, et al.
U.S. Patent No. 4,936,438, Glenn Waineo
U.S. Patent No. 4,534,843, Johnson et al.
U.S. Patent No. 6,309,279, Bowman et al.
U.S. Patent No. 5,460,478, Akimoto et al.
U.S. Patent No. 5,957,648, Bachrach
U.S. Patent No. 6,826,986, Lim et al.
U.S. Patent Application Publication No. 2004/0062633

A1, Rice et al.

U.S. Patent Application Publication No. 2005/0095110

A1, Lowrance et al.

U.S. Patent Application Publication No. 2004/0081538

A1, Rice et al.

U.S. Patent Application Publication No. 2004/0082546,

Elliott et al.

U.S. Patent Application Publication No. 2004/0193300,
Rice et al.

U.S. Patent Application Publication No. 2004/0081545,
Elliott et al.

U.S. Patent Application Publication No. 2004/0076596,
Elliott et al.

U.S. Patent No. 5,332,013, Sugita et al.

U.S. Patent No. 6,699,329, Mueller et al.

U.S. Patent No. 6,919,001, Fairbairn et al.

U.S. Patent No. 4,805,759, Rochet et al.

U.S. Patent No. 5,570,990, Bonora et al.

U.S. Patent No. 6,524,463, Gramarossa et al.

U.S. Patent No. 5,411,358, Garric et al.

U.S. Patent No. 6,026,561, Lafond

U.S. Patent No. 5,884,392, Lafond

Foreign Art Reference No. JP 02098157 A (Abstract)

Foreign Art Reference No. JP 00062949 A (Abstract)

Foreign Art Reference No. JP 00335799 A (Abstract)

Foreign Art Reference No. WO 97/09256 A1 (Abstract)

Foreign Art Reference No. WO 00/69724 A1 (WIPO)

Foreign Art Reference No. EP 0717717 B1 (EPO)

Foreign Art Reference No. EP 00735927 B1 (Abstract)

Foreign Art Reference No. EP 00912426 B1 (Abstract)

Foreign Art Reference No. EP 0 663 686 B1 (EPO)

Foreign Art Reference No. EP 0 663 686 A1 (EPO)

Virvalo, T.K., "Cylinder Speed Synchronization", Dec. 1978, Hydraulics and Pneumatics, Vol. 31, No. 12, pages 55-57.

Cheng, et al., "Adaptive Synchronization Control of a Robotic Manipulator Operating in an Intelligent Workcell", April 1990, IEEE Transactions on Industrial Electronics, Vol. 37, No. 2, pages 119-126.

Shih-Hung Li, et al. "An Ultrahigh Speed Assembly Robot System. Part I. Design", 1994, Proceedings 1994 Japan-U.S.A. Symposium on Flexible Automation - A Pacific Rim Conference, Vol. 2, pages 465-72.

Roberts, et al., "Feed Chute Geometry for Minimum Belt Wear", Sept. 1998, 6th International Conference on Bulk Materials Storage, Handling and Transportation, pages 153-159.

Saigo, et al., "Drive Control Systems for Processing Lines", 11/10/2000, Fuji Jiho (Fuji Electric Journal), Vol. 73, No. 11, pages 45-49, Japanese language (Abstract only).

Saigo, K., "Variable-speed Drive Systems for Industrial Plants", 11/10/2000, Fuji Jiho (Fuji Electric Journal), Vol. 73, No. 11, pages 10-14, Japanese language (Abstract only).

Park, et al., "Task Sequence Optimization for a Dual-Robot Assembly System using Evolutionary Algorithms", 2001, Proceedings of the Institution of Mechanical Engineers, Part B

(Journal of Engineering Manufacture), Vol. 215, No. B6, pages
835-46.

These references are also listed on the accompanying
Information Disclosure Statement (Form PTO-1449).

Consideration of the foregoing in relation to this
patent application is respectfully requested.

Respectfully Submitted,

A handwritten signature in black ink, appearing to read "Brian M. Dugan", with a long horizontal flourish extending to the right.

Brian M. Dugan, Esq.
Registration No. 41,720
Dugan & Dugan, PC
Attorneys for Applicants
(914)332-9081

Dated:

11/3/06
Tarrytown, New York

U.S. Department of Commerce, Patent and Trademark Office

Docket No.:

7096/Y01/SYNX/SYNX/HMM

Serial No.:

10/650,479

LIST OF RELEVANT ART CITED BY APPLICANT

(Use several sheets if necessary)

Applicants:

Martin R. Elliott, et al.

Filing Date:

August 28, 2003

Group:

3652

U.S. Patent Documents

Examiner Initial	Document Number	Issue Date	Name	Class	Subclass	Filing Date If Appropriate
	US-1	4,006,813	Rene Fluck			
	US-2	4,166,527	Earl F. Beezer			
	US-3	4,222,479	Dugan, et al.			
	US-4	4,294,344	Johannes D. van Maanen			
	US-5	4,538,720	Jean-Louis Limousin			
	US-6	4,552,261	Raudat, et al.			
	US-7	4,584,944	Clarence A. Dehne			
	US-8	4,653,630	Anna Bravin			
	US-9	4,679,685	Kenji Inoko			
	US-10	4,702,365	Chong-II Pak			
	US-11	4,708,727	Cardenas-Franco, et al.			

Foreign Patent Documents

Translation

Document Number	Date	Country	Class	Subclass	Yes	No
F-1	JP 02098157 A	04/10/90	Japan		Abstract	
F-2	JP 00062949 A	02/29/00	Japan		Abstract	
F-3	JP 00335799 A	12/05/00	Japan		Abstract	
F-4	WO 97/09256 A1	03/13/97	WIPO		Abstract	
F-5	WO 00/69724 A1	11/23/00	WIPO		X	

OTHER ART (Including Author, Title, Date, Pertinent Pages, Etc.)

OT-1	Virvalo, T.K., "Cylinder Speed Synchronization", Dec. 1978, Hydraulics and Pneumatics, Vol. 31, No. 12, pages 55-57.
OT-2	Cheng, et al., "Adaptive Synchronization Control of a Robotic Manipulator Operating in an Intelligent Workcell", April 1990, IEEE Transactions on Industrial Electronics, Vol. 37, No. 2, pages 119-126.
OT-3	Shih-Hung Li, et al. "An Ultrahigh Speed Assembly Robot System. Part I. Design", 1994, Proceedings 1994 Japan-U.S.A. Symposium on Flexible Automation - A Pacific Rim Conference, Vol. 2, pages 465-72.

Examiner

Date Considered

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with your communication to applicant.

U.S. Department of Commerce, Patent and Trademark Office LIST OF RELEVANT ART CITED BY APPLICANT (Use several sheets if necessary)				Docket No.: 7096/Y01/SYNX/SYNX/HMM		Serial No.: 10/650,479	
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U.S. Patent Documents							
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	US-12	4,720,006	Harald Lenherr				
	US-13	4,750,605	Brems, et al.				
	US-14	4,852,717	Ross, et al.				
	US-15	4,901,843	Jeffrey A. Lashyro				
	US-16	4,921,092	Crawford, et al.				
	US-17	5,052,544	David L. Anderson				
	US-18	5,092,450	Schommartz, et al.				
	US-19	5,341,915	Cordia, et al.				
	US-20	5,560,471	Prochut, et al.				
	US-21	5,664,254	Ohkura, et al.				
	US-22	5,782,338	Schuster, et al.				

Foreign Patent Documents							Translation	
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	F-6	EP 0717717 B1	07/07/99	EPO		X		
	F-7	EP 00735927 B1	11/03/99	EPO		Abstract		
	F-8	EP 00912426 B1	08/09/00	EPO		Abstract		
	F-9	EP 0 663 686 B1	06/18/97	EPO		X		
	F-10	EP 0 663 686 A1	07/19/95	EPO		X		

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OT-4	Roberts, et al., "Feed Chute Geometry for Minimum Belt Wear", Sept. 1998, 6th International Conference on Bulk Materials Storage, Handling and Transportation, pages 153-159.
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	US-23	5,797,249	08/25/98	Thomas Patterson Hartness			
	US-24	5,829,574	11/03/98	Mario DelSanto			
	US-25	5,865,292	02/02/99	Aguilar, et al.			
	US-26	5,887,701	03/30/99	Mario Spatafora			
	US-27	6,209,710	04/03/01	Mueller, et al.			
	US-28	6,227,346	05/08/01	Lecomte, et al.			
	US-29	6,227,348	05/08/01	Frei, et al.			
	US-30	6,234,300	05/22/01	De Vos, et al.			
	US-31	1,639,758	08/08/27	Jervis B. Webb			
	US-32	1,906,036	04/08/33	William E. Wunderlich			
	US-33	2,153,071	04/08/39	Leonard J. Bishop			

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F-12								
F-13								
F-14								
F-15								

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OT-7	Park, et al., "Task Sequence Optimization for a Dual-Robot Assembly System using Evolutionary Algorithms", 2001, Proceedings of the Institution of Mechanical Engineers, Part B (Journal of Engineering Manufacture), Vol. 215, No. B6, pages 835-46.
OT-8	
OT-9	

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	US-34	2,949,996	Roger Tonelli				
	US-35	3,058,604	Harper, et al.				
	US-36	3,131,801	Augusto Marchetti				
	US-37	3,184,032	John Petter Ingemar Jonsson				
	US-38	3,587,817	Bornstein, et al.				
	US-39	3,610,448	Ulrich Bornfleth				
	US-40	4,730,733	Kawamura, et al.				
	US-41	4,936,438	Glenn Waineo				
	US-42	4,534,843	Johnson et al.				
	US-43	6,309,279	Bowman et al.				
	US-44	5,460,478	Akimoto et al.				

Foreign Patent Documents							Translation	
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	F-16							
	F-17							
	F-18							
	F-19							
	F-20							

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	OT-11
	OT-12

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	US-45	5,957,648	09/08/99	Bachrach			
	US-46	6,826,986	12/08/04	Lim et al.			
	US-47	2004/0062633 A1	04/08/04	Rice et al.			
	US-48	2005/0095110 A1	05/08/05	Lowrance et al.			
	US-49	2004/0081538 A1	04/08/04	Rice et al.			
	US-50	2004/0082546	04/08/04	Elliott et al.			
	US-51	2004/0193300	09/08/04	Rice et al.			
	US-52	2004/0081545	04/08/04	Elliott et al.			
	US-53	2004/0076596	04/08/04	Elliott et al.			
	US-54	5,332,013	07-1994	Sugita et al.			
	US-55	6,699,329	03-2004	Mueller et al.			

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	F-23							
	F-24							
	F-25							

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	US-57	4,805,759	Rochet et al.				
	US-58	5,570,990	Bonora et al.				
	US-59	6,524,463	Gramarossa et al.				
	US-60	5,411,358	Garric et al.				
	US-61	6,026,561	Lafond				
	US-62	5,884,392	Lafond				
	US-63						
	US-64						
	US-65						
	US-66						

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	Document Number	Date	Country	Class	Subclass	Yes	No	
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	F-27							
	F-28							
	F-29							
	F-30							

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